

## REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

Claims 1, 8, and 12 have been amended for clarity and to ensure proper antecedent support for each recited feature.

Claims 1 and 12 were rejected, under 35 U.S.C. §103(a), as being unpatentable over Rong et al. (US 2004/0252670) (hereinafter “Rong”) in view of Li et al. (US 2005/0083998) (hereinafter, “Li”). Claims 2 and 6 were rejected, under 35 U.S.C. §103(a), as being unpatentable over Rong et al. (US 2004/0252670) in view of Li et al. (US 2005/0083998) and further in view of Nobukiyo et al. (US 2003/0073409) (hereinafter, “Nobukiyo”). Claim 3 was rejected, under 35 U.S.C. §103(a), as being unpatentable over Rong et al. (US 2004/0252670) in view of Li et al. (US 2005/0083998) and further in view of Hottinen et al. (US 2004/0066754) (hereinafter, “Hottinen”). Claim 4 was rejected, under 35 U.S.C. §103(a), as being unpatentable over Rong et al. (US 2004/0252670) in view of Li et al. (US 2005/0083998) and further in view of Srivastava et al. (US 6,735,178) (hereinafter, “Srivastava”). Claim 5 was rejected, under 35 U.S.C. §103(a), as being unpatentable over Rong et al. (US 2004/0252670) in view of Li et al. (US 2005/0083998) and further in view of Yoneyama et al. (US 2004/0162073) (hereinafter, “Yoneyama”). Claim 7 was rejected, under 35 U.S.C. §103(a), as being unpatentable over Rong et al. (US 2004/0252670) in view of Li et al. (US 2005/0083998) and further in view of Ryu (US 2002/0126645) (hereinafter, “Ryu”). Claim 8 was rejected, under 35 U.S.C. §103(a), as being unpatentable over Kamel et al. (US 6,496,531) (hereinafter, “Kamel”) in view of Li. Claim 9 was rejected, under 35 U.S.C. §103(a), as being unpatentable over Kamel et al. (US 6,496,531) in view of Li et al. (US

2005/0083998) and further in view of Nobukiyo et al. (US 2003/0073409). Claim 10 was rejected, under 35 U.S.C. §103(a), as being unpatentable over Kamel et al. (US 6,496,531) in view of Li et al. (US 2005/0083998) and further in view of Ghosh (US 5,991,285) (hereinafter, “Ghosh”). Claim 11 was rejected, under 35 U.S.C. §103(a), as being unpatentable over Kamel et al. (US 6,496,531) in view of Li et al. (US 2005/0083998) and further in view of Hans et al. (US 2005/0037766) (hereinafter, “Hans”). To the extent that these rejections may be deemed applicable to the amended claims herein, the Applicant respectfully traverses as follows.

Claim 1 now defines a base station apparatus that, *inter alia*, selects a mobile station to which a data channel is assigned, in accordance with both measured channel quality of a control channel for transmitting control information and independently measured channel quality of the data channel. The claimed subject matter provides an advantage of improving transmission efficiency, with improved suppression of interference between communications in adjacent cells, and further improving downlink capacity (see paragraph [0048] of the published U.S. application). (It should be noted that references herein to the specification and drawings are for illustrative purposes only and are not intended to limit the scope of the invention to the referenced embodiments).

It is respectfully submitted that Rong fails to disclose, either expressly or inherently, at least the subject matter now recited by the Applicant’s claim 1 of selecting a mobile station to which a data channel is assigned, in accordance with both measured channel quality of a control channel and independently measured channel quality of the data channel.

By way of review, Rong is directed towards providing a method of more precisely managing transmission power, especially transmission power of transmissions sent from a base station, in a spread spectrum environment (see Rong, paragraph [0014]-[0015]).

To achieve more precise transmission power management, Rong discloses that a base station (BS 20) adjusts the power margin in a downlink data channel (F-PDCH) and downlink control channel (F-PDCCH) based on the ACK/NACK message (R-ACKCH) transmitted from a mobile station (MS 22) (see for example Rong, paragraphs [0027] and [0031] and FIGs. 1 and 2).

More specifically, Rong is designed to adjust the power margin during a single call between a base station (BS 20) and a single mobile station (i.e., the MS 22). Rong discloses that the communications are between a single base station (BS 20) and a single mobile station (MS 22) throughout his specification. (see Rong, FIG. 1, depicting communications between the BS 20 and the MS 22; paragraph [0027], disclosing “the power margin adjustments described below preferably apply to a single call (e.g., a single phone call to the MS 22, a single period of the MS 22 being logged onto a data network such as the internet, or the period of time which a traffic channel is dedicated to the communication through the BS 20 to the MS 22)”; paragraph [0029], disclosing “the first control power margin 42 and first data power margin 44 for a call to the MS 22 is preferably initialized in accordance with the prior art”; paragraph [0030], disclosing “...the MS 22 receives the two-slot message 36 over the control channel 24a, properly decodes and demodulates it, and determines that the corresponding packet-1 message 38 is directed to it”; paragraph [0026], disclosing “[i]t is important to note that the below description referring to changes in power margins to adjust power level transmitted by the BS to the MS 22 apply only to transmissions to that particular

MS 22”). As indicated by Rong’s consistent reference to a single mobile station MS 22, it is clear that Rong’s invention is directed towards improving power transmission between a base station and a single mobile station, and is not directed towards, or even related to, a base station selecting a mobile station from among various mobile stations.

Therefore, unlike the Applicant’s claim 1, in Rong, the base station adjusts the transmission power with the user mobile station that it is in communication with, i.e., a user mobile station that has already been “selected” and has a data channel assigned to it. (See Rong, Abstract). Rong, therefore, fails to disclose, either expressly or inherently, at least the recited feature in Applicant’s claim 1 of a base station comprising a selection section which ...”selects a mobile station to which a data channel is assigned, in accordance with both measured channel quality of a control channel for transmitting control information, which includes assignment information of the a data channel or modulation and coding scheme (MCS) information, and independently measured channel quality of the data channel.”

Accordingly, the Applicant submits that even if Rong and Li were combined as proposed in the Final Rejection, the combination would still lack at least the above-noted features of claim 1 and thus these references, whether considered individually or in combination, do not render obvious the recited subject matter of claim 1. Independent claim 12 similarly recites the above-mentioned subject matter distinguishing claim 1 from the applied reference, although claim 12 does so with respect to a method. Therefore, allowance of claims 1 and 12 and all claims dependent therefrom is considered to be warranted.

With respect to the rejection of claim 8, it is noted that claim 8 defines a mobile station apparatus that generates channel quality information (CQI) from the measured channel quality of a data channel, and determines whether or not the CQI is to be transmitted based on

the measured channel quality of a control channel. The claimed subject matter provides an advantage of improved reduction in the amount of uplink transmission (see paragraph [0084] of the published U.S. application).

It is respectfully submitted that Kamel fails to disclose at least the subject matter recited by the Applicant's claim 8 of determining, in accordance with the channel quality of the control channel, whether or not the CQI (the channel quality of the data channel) is to be transmitted.

Although the Office Action (page 11, lines 6 and 7) alleges that FIG. 5 and col. 15, lines 25-37 of Kamel disclose this above-noted feature of Applicant's claim 8, these cited portions of Kamel merely disclose transmitting power control commands to "power up" or "power down," based on comparisons with control "targets." Specifically, col. 15, lines 25-37 discloses:

"The method of FIG. 5 may be further explained by the following example, where a separate data channel and a control channel on different carriers participate in a soft hand-off. Accordingly, a mobile station 30 may establish a data target value and control target value. The mobile station 30 measures the physical data channel and the control channel (e.g., a group of logical channels originating from different sectors) to attain a data measurement and a control measurement for comparison to the data target and the control target, respectively. Two different power control channels can send independent power control commands to the base stations to power up or power down the base stations as appropriate (emphasis added)."

As noted above, Kamel discloses that a mobile station (1) measures a physical data channel, compares the measured physical data channel to a "data target", and determines whether or not to send a "power control command" to the base station based on the comparison, and (2) measures a control channel, compares the measured control channel to a

“control target”, and determines whether or not to send another, independent “power control command” to the base station based on this other comparison.

However, Kamel does not disclose or suggest the feature recited by Applicant's claim 8 of a determination section that determines whether or not the channel quality information (i.e., the measured channel quality of a data channel) is to be transmitted, in accordance with the measured channel quality of the control channel. In contrast, as explained above, Kamel discloses that the mobile station 30 transmits power control commands for the data channel and the control channel based on comparisons to a “data target” and a “control target”, respectively. (see col. 15, lines 25-37). That is, Kamel discloses that a mobile station independently transmits power control commands of two different channels, whereas the Applicant's claim 8 recites that the determination section determines whether or not the channel quality of one channel (i.e., the data channel) is to be transmitted, in accordance with the channel quality of the other channel (i.e., the control channel). Kamel fails to disclose or suggest, either expressly or inherently, at least this recited feature of Applicant's claim 8.

Accordingly, the Applicant submits that even if Kamel and Li were combined as proposed in the Final Rejection, the combination would still lack at least the above-noted features of claim 8 and thus these references, whether considered individually or in combination, do not render obvious the subject matter recited by claim 8. Therefore, allowance of claim 8 and all claims dependent therefrom is considered to be warranted.

In view of the above, it is submitted that this application is in condition for allowance, and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a personal communication, the examiner is requested to e-mail the undersigned at the address listed below to set up a telephone discussion.

Respectfully submitted,

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